Boston AMSC

Best Practice: Creation of an Area Maritime Security Committee (AMSC) Permanent Advisory Group (PAG) for Active Response in the marine environment. The PAG is responsible for ensuring the Active Threat Response Concept of Operations (CONOPS) is exercised twice a year as well as coordinating active threat training for law enforcement personnel and ferry operators. The training includes law enforcement tactics and communication protocols, as well as actions for ferry operators to minimize death and injury onboard the ferry, as well as support the arrival of maritime law enforcement personnel. The AMSC tested the CONOP during a Functional Exercise designed to challenge the initial communications and initial response to an active threat aboard a passenger ferry. Multiple lessons learned will be incorporated and further tested in a 2018 function exercise(s).

Best Practice: The AMSC hosted a cyber security symposium in conjunction with a semiannual AMSC meeting. The symposium included cyber security experts from government, academia, and industry. The goal of the symposium was to raise awareness of cyber security threats to the Marine Transportation System (MTS), review current and future cyber security policy initiatives, and discuss resources available to assist in a cyber security incident. The target audience included facility security officers and Federal, State, and Local government agencies that play a role in preventing, detecting, and mitigating a cyber security event in the MTS.

Best Practice: Held first local Boston area Facility Security Officer (FSO) Summit, which included FSO sponsored training led by a CG approved training entity, followed by general meeting of FSO to share common interests and topics. It is anticipated that this will become an annual event and even grow to include frequent gatherings of local FSO to share tips; lessons learned and raise the visibility among FSO's of common problems, challenges and solutions.

Long Island Sound AMSC

Best Practice: In follow-up to a Transportation Security Incident (TSI) related Maritime Mass Rescue Operation (MMRO) field drill conducted in 2016, one of the large passenger/vehicle ferry operations (Cross Sound) succeeded in securing a Port Security Grant to fund development of Active Threat training program for the Ferry Crews. This is a needed focus based on lesson learned from past MMRO drill. Plans to adapt Virtual Critical Asset Tour (VCAT) from the June Port Security Risk Assessment (PSRA) to augment the training.

Recommendation: Standardized crew training for Active Threat/Active Shooter Scenarios. Partner with National Passenger Vessel Association (PVA).

Best Practice: AMSC coordinator distributes the weekly "Cyber Domain Situational Awareness" slide produced by the USCG Cyber Command to all AMSC and subcommittee port partners. This is shared with the CT Cyber Security committee and all regional maritime partners throughout the Long Island Sound (LIS) Captain of the Port (COTP) zone and widest dissemination is emphasized.

Recommendation: CG CYBER Command could post in Homeport share site or perhaps weekly in the CG Maritime Commons Blog.

Best Practice: Continued effective use of Homeland Security Information Network (HSIN) Adobe Connect to hold virtual AMSC Executive Steering Committee (ESC) and Subcommittee meetings, along with supporting the information sharing environment, to help reduce the impact travel budget constraints, to allow additional access for "members at large" and to provide the AMSC ESC a "meeting room" mechanism to facilitate sharing information among members, especially for a fast moving/exigent situation. HSIN Connect virtual meeting rooms are maintained for the AMSC ESC and for the three CT regional port area Marine Group subcommittees (see example for AMSC meeting room at: https://share.dhs.gov/amsc-esc/). The capabilities of HSIN Connect significantly adds to ability to collaborate, share and communicate, and can assist in quick moving emerging situations if necessary. ADOBE provides a link to get a free mobile smart phone app or via their APP STORE: http://www.adobe.com/products/adobeconnect/mobile-meetings.html
This allowed partners and CG members to use their mobile smart phones to participate in HSIN Connect meetings, including the ability to stream and view video and pictures from their phones.

Recommendation: Establish a Community of Interest (COI) in HSIN for AMSC use.

Best Practice: AMSC MEMBERS Participated with the State in the national CYBERGUARD PRELUDE 2017 exercise. As a result of our AMSC input some of the national exercise play was able to focus on unique issues related to the maritime domain, such as Cyber interference of International Mobile Satellite Organization (INMARSAT) or other ships' long range comms systems, spear phishing of Facility Security Officers (FSO)s at our Maritime Transportation Security Act (MTSA) facilities, suspected intrusion into camera/monitoring systems, spoofing of CG and other Govt Agencies, or spoofing of regulated industry e-mail systems to create confusion, potential Global Positioning System (GPS) and Automatic Identification System (AIS) spoofing attack, or UAS wireless access point attack/probing.

Recommendation: National Maritime Security Advisory Committee (NMSAC) Champion participation of AMSC elements in this Annual National Exercise and provide exercise control examples of Master Scenario Events List (MSEL) injects pertinent to the maritime domain.

New York and New Jersey AMSC

Best Practice: Sector New York has more than 40 Memorandum of Understandings (MOUs) with our port partners for search and rescue assistance and security and safety zone enforcement. These agreements set forth the guidelines for working together including communications, authorities, responsibilities, and training. Furthermore, these agreements formally establish a relationship for cooperation, which is critical to the success of operations in Sector New York, especially for high visibility events such as United Nations General Assembly. In addition, we have been successful in leveraging these relationships to benefit from the unique capabilities of our port partners to augment operations in the nation's highest risk port.

Best Practice: Sector New York Cyber Liaison Officer spent several weeks working directly with facility security officers and information technology managers in different industries, including global financial leaders. The liaison officer returned to Sector New York having formed relationships with cyber professionals across several industries, many of whom are members of the AMSC, and had acquired knowledge of industry best practices on cyber resiliency and recovery.

Northern New England AMSC

Best Practice: Bar Harbor Whale Watch works very closely with local responders to ensure close communication and knowledge of each other's abilities and weaknesses.

Best Practice: During Random screening Bar Harbor Whale Watch, request a photo ID along with the passenger's ticket.

Best Practice: The sector produces at the end of each year a Sector Northern New England (SNNE) Year in Review. This informative publication highlights Sector's accomplishments as the sector as a whole and by department to include AMSC major accomplishments.

Best Practice: SNNE continues to join hands with the University of Southern Maine to develop innovative training, incorporate cyber security elements into exercises, and sponsor cyber security summits.

Best Practice: To kick off the Cruise ship season, SNNE's AMSC established an annual preseason cruise ship seminar to include local responders, the cruise ship industry, local hospitals, and port management. At the end of the season, a post-season seminar is held.

Best Practice: To develop and fund a Cyber Security Summit, SNNE joined with the University of Southern Maine, Maine Emergency Management Agency, and Senators Collins and King to sponsor the Partnership in Cyber Security Summit.

Best Practice: SNNE continues to utilize regional subcommittee to manage the extensive AMSC responsibilities over a four-state region. Each regional subcommittee has appointed subcommittee co-chairs who also serve as members of the AMS Executive Steering Committee.

Best Practice: The AMSC with support from the University of Southern Maine is completing Wi-Fi assessments for major ports across SNNE Area of Responsibility (AOR). Any vulnerabilities will be identified and reported to MTSA regulated facilities and critical infrastructure, and if needed, with recommendations on how to prevent or mitigate the threats.

Best Practice: SNNE continues to invite MTSA regulated facilities to participate in Area Maritime Security and Training Exercise Program (AMSTEP) exercises and receive annual exercise credit for MARSEC Level increase verified by Sector personnel. This practice stimulates building strong relationships with port facilities and continually test and improves the Sector's notification procedures.

Best Practice: SNNE continues to staff state Emergency Operations Centers in Maine and New Hampshire with Coast Guard liaison. Along with participating in multiple large-scale exercises to examine short-term recovery operations following an incident including damage assessments, activation and coordination of Maine National Guard and Joint Operations Center, maintaining critical supply chains, and establishing power and telecommunications. This was tested during late October nor'easter where over 50% of the state lost power, including several key waterfront facilities and the Coast Guard liaison helped prioritize power restoration to maritime facilities.

Southeastern New England AMSC

Best Practice: In order to mitigate the risk of an active shooter scenario on ferry system's in the region, Sector SENE personnel including the Prevention Department, Response/Enforcement Division and the Contingency Planning and Force Readiness Division have developed, as part of an announced annual safety or security inspection, a drill that evaluates a ferry crew's performance during a simulated active threat on board a ferry.

Best Practice: The Rhode Island Common Operating Picture (RICOP) is nearing completion to be utilized in the Sector SENE Command Center in Woods Hole, MA. This system consists of software that integrates multiple Federal, State and Local agencies with the ability to view video cameras strategically placed in the maritime zone of Rhode Island. This system has

proven to be extremely useful for responding to all hazards in addition to just port security incidents but was only able to be viewed in the Sector SENE East Providence, RI office. Providing access to the staff has been a goal since the development of the system, as it will be utilized to its fullest potential for daily Maritime Domain Awareness and for emergencies.

Best Practice: Port Security Forums; held bi-annual and conducted in conjunction with a safety forum, are well-attended events in both southeast Massachusetts and Rhode Island. These forums, which have been held for over fourteen years, continue to be an excellent venue for the presentation of timely/evolving issues to a broad segment of our port partners, federal, state, and local agencies, and the marine industry. Importantly, these forums provide an audience for our port partners to make presentations and pass information that would otherwise not happen.

Delaware Bay AMSC

Best Practice: The New Jersey Cybersecurity and Communications Integration (NJCCIC) continues to share cyber threat information and additional resources and training opportunities with the AMSC Cyber Subcommittee.

Best Practice: Annually each February Sector Delaware Bay facilitates a Joint Meeting of the Delaware Bay Area Committee and AMSC. The joint meeting agenda contains topics of interest to both communities. This meeting promotes partnerships and information sharing of policy, best practices, and lessons learned. The 2017 Joint Meeting included presentations on TWIC, Petroleum Logistics and Short Term Outlook, Pipeline Safety and Security, and Port Security Grant Process Review.

Best Practice: In September 2017, Captain Scott Anderson briefed at New Jersey's Domestic Security Preparedness Task Force meeting on the US Coast Guard's activities in the sector, and the multi-agency response to a mustard agent incident. New Jersey's Domestic Security Preparedness Task Force brings together state government principals to address domestic security and preparedness policies in New Jersey and make recommendations to the Governor.

Best Practice: In February 2017 at the Joint Meeting of the Delaware Bay Area Maritime Security Committee and Area Committee, Lisa Conte from New Jersey Office of Homeland Security and Preparedness (NJOHSP's) Grant Management Bureau and the Chair of the AMSC Grants Working Group presented on the Port Security Grant Program. This workshop provided an opportunity to ensure the Area Maritime Security Committee and Area Committee members understand the grant process.

Best Practice: Having identifying the need for a port forum that could focus on maritime tactical operations, the AMSC surveyed AMSCs nationwide and requested information on

Law Enforcement or Special Operations Sub-Committees. Based on models and best practices from other AMSCs, Delaware Bay's AMSC stood-up a Maritime Tactical Operations Working Group (MTOG). Since its conception, it has enhanced mutual respect, innovation and improved communications among law enforcement and fire departments within the Port. Additionally members of this working group are being rolled into an Incident Command System (ICS) Group under Operations for the 2018 Tall ships event in May. The relationships built through the MTOG will make a positive difference when issues arise during the event.

Best Practice: To ensure Delaware Bay AMSC's leadership is keeping abreast of emerging technologies, several different avenues regarding Unmanned Aerial Systems (UAS) were explored and new partnerships were formed.

Maryland-NCR AMSC

Best Practice: The sustained participation by regional law enforcement agencies in the Maritime Tactical Operations Group (MTOG), an AMSC Subcommittee, has vastly improved law enforcement agencies operational response to a potential maritime security incident. Efforts to improve communication, joint tactics and training, personnel/boat equipment uniformity, and grants collaborating are ongoing, productive, and effective. The group includes 22 law enforcement agencies that hold meetings and conduct ongoing training for joint tactics. They conduct frequent real world security events and joint exercises. Involved in joint boarding's monthly (recreational and commercial). Organizes joint training such as Basic Maritime Operators Course (BMOC), Tactical Boating Operators Course (TBOC), Use of Force Training, and Tactical Walk-Through (Cruise Liners, Deep Drafts, etc.). Joint operations include State of the Union Address (National Special Security Event), and the Democratic Issues Conference. Additionally, partially due to the relationships developed with MTOG partners, Sector Maryland-NCR now has two full time U.S. Customs and Border Protection (CBP) agents assigned and working physically at the Coast Guard unit. This close partnership will significantly improve coordination in the port and throughout the entire area of responsibility.

Best Practice: The AMSC's are an excellent avenue for coordinating the numerous real world security events (i.e., National Security Special Events [NSSE's]) that SECTOR MD-(National Capital Region (NCR) are involved. Our commercial and law enforcement members are able to express concerns and resolve issues before detailed planning begins.

Best Practice: AMSC Cyber and Intel Subcommittees. Both fully operational in 2017. A Cyber Workshop and a Cyber Seminar were both held in 2017. Intel met with committee to prepare for State of the Union Address and Democratic Issues Conference.

Best Practice: There are several large construction projects in the NCR to rebuild the waterfront infrastructure. The National Harbor complex, the Southwest Waterfront Development along Washington Channel, and new waterside development on the Anacostia River will increase and change the maritime operational picture. Additional marinas, recreation vessels, ferry services, and concerns for fire response to large waterside buildings can only add to already high operational activity. The City of Alexandria, VA is also developing plans for multi-year waterfront infrastructure rehabilitation. An all hazards response vessel awarded to the City of Alexandria, and a Washington D.C. fire response shallow water vessel, which were both newly awarded through the DHS Port Security Grant Program (PSGP), provides increased maritime response for the NCR. The NCR AMSC is keeping abreast of these waterside development projects and will update the AMSP as needed.

North Carolina (NC) AMSC

Best Practice: The AMSC continued regular cyber security sub-committee outreach to increase awareness of cyber security threats. The cyber security sub-committee, led by Sector NC Intelligence staff, sponsored several guest speakers focusing on education and cyber awareness. Among notable speakers was a Cyber Security specialist from Argonne National Laboratory who provided a no-cost cyber security overview course and penetration testing demonstration.

Best Practice: The law enforcement sub-committee, led by Sector NC Enforcement Division staff, re-instituted quarterly meetings and monthly law enforcement breakfast meetings focused on interagency partnerships and local agency support for port security measures. As a result, two additional law enforcement agencies are currently pending signatures on Memorandums of Agreement with Sector North Carolina to support these efforts. In addition, the sub-committee hosted shipboard training for federal and local agency canine handlers onboard the Coast Guard Cutter Diligence. The training exposed canines and handlers to shipboard environments and increased partner agency interest and support for underway vessel boardings.

Virginia AMSC

Best Practice: Partnering with the Maritime Security East Expo has brought state and federal government closer to industry and a majority of topics at the event closely aligns with the AMSP.

Best Practice: Strong Federal, State, Pilots Association and Local industry relations ensure a smooth process for port closures and re-opening during severe weather events.

Recommendation: Continue to build relationships.

Charleston AMSC

Best Practice: Implementation of Alastar as the local COP was a resounding success across the AMSC. AMSC members achieved consensus agreement to cost-share the tool enabling equal access by all AMSC members, and, through a joint Port Security Grant application, AMSC agencies and organizations will have the means to fund their own use of Alastar in 2018. Quarterly training and software development sessions hosted by the AMSC Communications Subcommittee will provide end-users opportunities to broaden their knowledge of Alastar tools and to provide Alastar software engineers the user feedback needed to design and implement software enhancements.

Best Practice: The AMSP Radiological/Nuclear annex was designed in 2015, exercised in 2016, and implemented for response in 2017 during the "dirty bomb" incident. AMSC members and SeaHawk agency representatives initiated joint operational planning and intelligence/ information sharing to mitigate the potential threat without prompting or official notification to establish a Unified Command on the SeaHawk IOC watch floor. Based on the successful implementation of the AMSP Radiological/Nuclear annex, the Radiological/Nuclear Subcommittee shared the plan with numerous ports across the country including Pacific Area (PACAREA).

Florida Keys AMSC

Best Practice: During the early stages of planning for the AMSTEP 17 exercise, it was discovered that the local community college was also planning for an active shooter exercise around the same time. Through a coordinated effort with several AMSC members to include a few members from Law Enforcement agencies, we were able to combine the two exercises into one joint full-scale exercise that benefited both the AMSC and additional new agencies. This allowed the exercise planning committee to cast a broader net, adding several new players (agencies) to the exercise and committee.

Best Practice: Closed Circuit Television system with web access installed by the Port of Key West at one of their MTSA facilities. This newly installed system is not only expandable, but it allows real time access via a small phone to authorized committee members. The Port has future plans to continue to expand this system to each of its Port Facilities.

Northeast and Eastern Central Florida AMSC

Best Practice: Passenger Terminal Evacuation Plans - The development of active shooter specific evacuation plans, particularly for passenger terminals, was identified as a Best Practice.

Puerto Rico and US Virgin Islands AMSC

Best Practice: Quarterly Alert Warning System (AWS) Tests. The AMSC agreed to tests of the Alert Warning System (AWS) and Homeport notification system on a quarterly basis in order to ensure the most current contact information. Results of these drills are tracked and accounted for in the Contingency Preparedness System. Since inception this year, we have increased our response rate by 60%.

Best Practice: Port Security Grant Strategic Working Group (PSGSWG). We have established the PSGSWG as a sub-committee of the AMSC. The PSGSWG focuses on multiagency and multi-facility projects. This was a great venue to socialize the anticipated short grant cycle for FY2017. Additionally, PSGSWG increased the variety of categories for which applicants from our COTP zone traditionally submit grants. In addition to boats and cameras, we are now seeing applications for training, TWIC, robotic explosive detection capabilities and Emergency Communications Systems.

Best Practice: Intermodal Virtual Imaging Enhancement Workshop (IVIEW)/Port Assessments. The AMSC partnered with Transportation Security Administration (TSA) on a program in virtually mapping many of our highest risk port facilities in San Juan using the system called the VIEW at no cost to our port partners. We received Intermodal Virtual Imaging Enhancement Workshop (IVIEW) data/facility maps to enhance the 2016 Port Assessments done by CG-Port Security Assessment (PSA)/CG-Office of Port and Facilities Compliance (FAC). Also will leverage the interactive aspects of the tool to improve training and exercises for potential responses to Transportation Security Incidents (TSIs).

Savannah AMSC

Best Practice: Routinely establish a Unified Command and generate an incident action plan for planned events whenever possible. This process has reaped great benefits for the multiagency collaborative efforts in Savannah. AMSC partners have become increasingly engaged in the planning process and have become more comfortable and knowledgeable with the unified command system construct.

Best Practice: Facility Security Officer (FSO) "Security Roundtable – positives and areas of improvement." Marine Safety Unit (MSU) Savannah has instituted "roundtable" discussions as a standardized AMSC agenda item. FSOs are asked to provide one security "positive" and one security "area of improvement" with respect to their facility. This has proven invaluable from an informational exchange and idea sharing perspective. Overall, Maritime Domain Awareness (MDA) among the MTSA regulated facilities has greatly improved.

Best Practice: All AMSC meetings include a recurring agenda item focused on cybersecurity. With the trending concerns of cyber security, the AMSC meetings provide an opportunity to exchange and share perspectives of cyber awareness, education, notification and support resources.

Best Practice: Attending and participating in Georgia State Homeland Security Task Force, Emergency Management Agency-Georgia (EMAG) and Local Emergency Planning Committee (LEPC) meetings foster partnerships and collaboration at all levels of Government, NGOs, industry and the public.

Southeast Florida AMSC

Best Practice: Numerous AMSC entities affiliated with the Regional Domestic Security Task Force received Urban Area Security Initiative (UASI) and Port Security Grants (PSGP) to enhance security surveillance and response capabilities. UASI funded radar deployment and port security grants funded "Command Bridge" systems currently being outfitted in numerous port areas, which connects agencies, expands the regional collaboration of multi-jurisdictional, Federal, State and Local Law Enforcement assets, and directs critical information into a single, clear, common operating picture. The larger operating picture is a force multiplier, detects potential threats to the entire Southeast Florida AMSC area of responsibility, enables agencies to identify critical port vulnerabilities, better coordinates individual and inter-agency operations, minimizes duplication of resources and mitigates maritime risks.

Best Practice: Held a workshop to update the Essential Elements of Information within the Marine Transportations System (MTS) Recovery Plan (Annex 10100 of the SE Florida Area Maritime Security Plan). Major objectives of the workshop were to validate roles, responsibilities, and contact lists necessary for effective coordination of recovery activities. Identification of critical MTS infrastructure and prioritization was also discussed. Participants included Sector Miami, AMSC Miami members, the Port Authority, Broward County Sheriff's Office, and the Port Everglades Pilots Association.

Best Practice: Held a workshop with Local, State, and Federal Law Enforcement entities to discuss active shooter in the marine environment scenarios. In recent years, active shooter incidents have increased in both number and intensity, which pose a continued threat to domestic security. The intent of the workshop was to look at how an active shooter incident can be used within the terrorist inventory as a means to threaten the security of the ports. The group discussed their roles in various active shooter scenarios including responses ashore at MTSA regulated facilities, underway on vessels in state waters, and underway outside of state waters. Future plans are to conduct county specific tabletop exercises followed by a full-scale exercise involving active shooter scenarios. We are also looking at establishing an AMSC law enforcement sub-committee to continue to look at this and other law enforcement initiatives in the maritime environment.

Western Florida AMSC

Best Practice: Utilize the Executive Steering Committee of the AMSC to prove recommendations to the COTP for the PSGP field review.

Best Practice: Provide training for AMSC members utilizing the Incident Management Team (IMT) Assist team prior to scheduling a full-scale AMSTEP exercise.

Houston-Galveston AMSC

Best Practice: The Houston Ship Channel Security District continues to provide critical funding for security patrols in the area. From the City of Houston alone, this resulted in 246 hours of regular security overflights, and 82 hours of "special" overflights using the Bell 412 high-capacity helicopter. In addition, the city conducted 705 hours of waterborne patrols. Harris County Marine Unit conducted 1539 hours of maritime patrols and 101 hours of aerial surveillance, along with 3884 hours of landside patrols of the Houston Ship Channel. Texas Parks and Wildlife was also brought onboard this year as another waterborne patrol asset, conducting patrols and 30-40 law enforcement boardings of vessels each month.

Best Practice: The Sector Interagency Operating Center (IOC) continues to evolve with new agencies in addition to the Harris County Sheriff's Office. AMSC member agencies including Custom Border Patrol (CBP's) Offices of Field Operations and Air and Marine, Transportation Security Administration, and Texas Parks and Wildlife have all signed agreements with the USCG formalizing their participation in the IOC. These are beneficial to the IOC in the form of enhanced Maritime Domain Awareness and response capability along with reduced response times. The benefit of the additional agency expertise and experience physically present in the IOC is tremendous and is in line with current Regional Coordinating Mechanism (ReCoM) initiatives. Sector Houston-Galveston will continue to pursue further representation from additional partner agencies.

Best Practice: In 2017, the Houston-Galveston AMSC meticulously planned its annual AMSTEP exercise to conduct an Active Shooter, Functional Exercise on board a local 115 passenger local dinner cruise vessel. Over 20 representatives from local government and law enforcement were part of the Exercise Planning Team that used actual field intelligence, terrorist tactics and "Simulation" rounds to simulate the taking of an underway Coast Guard Sub-Chapter T, certificated vessel. Although this exercise was preempted by Hurricane Harvey and postponed, all facets of the planning evolution will be re-used in the planning of AMSTEP 2018.

Gulf of Mexico AMSC

Best Practice: Collaborating with agencies such as the DHS National Cyber Exercise and Planning Program and Maritime and Port Security (MPS0-Information Sharing and Analysis Organization (ISAO) can lead to a more robust exercise as it brings in exercise experts to hone the objectives and the scenarios to achieve them.

Mid-South AMSC

Best Practice: Frequent Coast Guard Alert and Warning System (AWS) Notification Drills - Quarterly AWS notification drills are conducted to ensure that no less than sixty percent of the message recipients acknowledge the message within eight minutes, and no less than eighty percent message acknowledgement at the end of one hour. The AWS Notification Drills provide an opportunity for every stakeholder to participate on a regular basis and it is a recognized reminder to remain vigilant. AWS is a program that all private and public sector marine safety and maritime security stakeholders clearly appreciate.

Best Practice: Participation in other committees and groups such as the Urban Area Security Initiative and the Local Emergency Planning Committee to collaborate on planning and exercises. Many of these committees are willing and eager to collaborate on an exercise with a maritime nexus.

Best Practice: Joint exercise planning with Shelby County Office of Preparedness, Local Emergency Planning Committee (LEPC), and the rail industry tested the response to a HAZMAT release with potential for impacting a navigable waterway. This full-scale exercise provided a very realistic scenario for local responders to test communications, equipment, and personnel in preparation for this type of incident, with implications for disrupting the maritime transportation system.

New Orleans AMSC

Best Practice: The Lower Mississippi River Security Working Group has conducted annual port-wide exercises aimed to test facility security plans for the past several years. On average, 75 facilities and vessels located in Sector New Orleans COTP zone were involved. These exercises raise awareness and improve notification procedures in event of suspicious incidents, and Maritime Security (MARSEC) level changes, for facilities across the region. In addition, participants have the opportunity to fulfill the annual exercise requirements set forth in 33 CFR 104.230 and 105.220.

Northeast Gulf of Mexico AMSC

Best Practice: The Sector's Port Security Specialists (PSSs) have been assigned specific ports/states to support the AMS Subcommittees and serve as supporting Co-Chairs for the subcommittee with the industry Co-Chair as the primary lead for each port area. This arrangement allowed a more effective localized interaction, relationship building, coordination of Subcommittees and other port security efforts.

Best Practice: The structure of the AMSC Managing Board was planned to provide representation across an AOR covering five deep draft ports and a significant inland waterways system. By design, each port and the inland waterways area has a designated position on the AMSC Managing Board, which is usually filled by the port's Director or a senior management person responsible for operations and security. This ensures that the differing dynamics of each port area are incorporated into the overall AMSC. Likewise, a representative of the area's largest major maritime industry types (e.g., refinery, chemical production, vessel support operations, etc.) are included as representatives for that portion of the industry. Coordination with Federal Law Enforcement is seen as significant so there is a designated position for the Federal Bureau of Investigation (FBI's) Special Agent in Charge, as well as a position designated for the US Army Corps of Engineers. Under the revised AMSC Charter, if a Managing Board member cannot make a meeting to conduct committee business, an alternate representative can be designated in writing to ensure participation and interaction as needed for that meeting.

Ohio Valley AMSC

Best Practice: Sector Ohio Valley (SOHV) personnel continue a proactive outreach to port stakeholders via attendance at local industry meetings, Local Emergency Planning Committee (LEPC) meetings, training and exercises. Site visits are routinely conducted with Facility Security Officers at high-risk facilities to discuss relevant maritime security issues, promote attendance at AMSC meetings, promote the use of the Alert Warning System (AWS) and HOMEPORT website, and to update and validate data in the CG Maritime Security Risk Analysis Model (MSRAM) database. These efforts have led to better working relationships with Other Government Agencies (OGAs) and steady attendance at AMSC meetings, security training and exercises throughout the region.

Best Practice: In CY 2017, SOHV AMSCs obtained Radiological/Nuclear Detection (RND) screening equipment. Utilizing PSGP funds, Louisville AMSC agencies purchased approximately \$180K of RND screening equipment including 40 Personal RND (PRND) pagers, 4 backpack RND detectors, and 4 Radio Isotope Identification Devices (RIID). SOHV's other AMSCs each received excess RND equipment from DNDO, with each receiving 10 PRNDs and 1 RIID. The RND equipment coupled with the existing Ohio Valley

Maritime RND CONOPS and Quick Start RND training sessions, provide enhanced RND maritime screening capability throughout SOHV's AOR.

Best Practice: SOHV AMSCs continued to promote cybersecurity awareness for AMSC members by publishing cybersecurity information on HOMEPORT, conducting cybersecurity Work Shop (WS) exercises, and offering DHS cybersecurity training sessions for AMSC members.

Best Practice: SOHV AMSCs continued to conduct Maritime Security (MARSEC) notification drills throughout the AOR. MARSEC notification drills provide port partners an opportunity to simulate an increase to the MARSEC level at their respective company operations, and to conduct an internal company Tabletop Exercise (TTX) for MTSA annual credit requirements.

Best Practice: As scheduling permits, SOHV AMSCs use small-scale WS, Seminar (SEM), and TTX during meetings allowing members to validate the AMSP, as well as, ensuring committee member familiarity with Plan elements. These type exercises are well received by AMSC membership.

Best Practice: SOHV MARSEC/AWS notification drills continue to be a successful method for exercising Facility Security Plans (FSPs) at MTSA regulated facilities. The drills are of value to Facility Security Officers (FSOs), serve as a means to test the AWS system, and help keep port partners HOMEPORT accounts active.

Best Practice: In CY17, the Port of Huntington/Tri-State AMSC participated in a first ever, radiological and nuclear (RAD/NUC) TTX and Full Scale Exercise in the port hosted by the Cabell and Wayne County, West Virginia (WV) LEPC. This exercise series was the first to test the AMSC's newly developed RAD/NUC CONOPS. Participation in county LEPC exercises help reduce workload on the AMSC, increase coordination between traditional maritime response agencies with OGAs and enhance overall port-wide training initiatives for AMSC, CG and industry representatives. Additionally, these events help guide future development of RND and response programs, equipment procurement and training initiatives in the port.

Pittsburgh AMSC

Best Practice: MSU Pittsburgh personnel continue a proactive outreach to port stakeholders via attendance at local industry meetings, training, and exercises. Personnel conducted visits with Facility Security Officers to discuss relevant maritime security issues and promote attendance at AMSC meetings.

Best Practice: AMSC general meetings now include a "facilities briefing" as part of the meeting agenda. Our facilities personnel are our most direct representatives in the field. The facility briefing allows port partners to understand the regulatory process and have their questions answered as it relates to their facility security plans or other relevant topics.

Best Practice: Local facility and agency expertise were incorporated into recent functional exercise planning. This allowed crafting of scenario's that are realistic and in keeping with local security and infrastructure concerns. Two state intelligence fusion centers were used to generate a relevant time line that supported the scenario.

Sabine-Neches AMSC

Best Practice: The Sabine-Neches AMSC continues mission support through regular participation in locally established committees and organizations. Memberships include The Sabine-Neches Chief's Association (SNCA), Southeast Texas Waterways Advisory Council (SETWAC), Port Readiness Committee (PRC), Southeast Texas Maritime Operations Committee (SEMOC), and Local Emergency Planning Committees (LEPC) for Jefferson, Orange, and Hardin Counties, Southwest Louisiana Mutual-Aid Association (SLMA). All listed above have established positions or agenda items related to Maritime Security in which the AMSC's purpose may be referenced, addressed, or carried out. This promotes maximum participation by eliminating redundancies as many referenced herein have direct interest or responsibility consistent with the AMSC and meet regularly. Additionally, the Sabine-Neches AMSC frequently collaborates with the Southeast Texas Regional Planning Commission (SETRPC), our regional Council of Governments (COG) appointed by the State of Texas. This planning initiative allows for the harmonization of State and Federal grant funds at the local level maximizing risk reduction and return on investment. The South East Texas Regional Planning Commission (SETRPC) Director of Homeland Security, Ms. Sue Landry serves on the AMSC Executive Steering Group.

Best Practice: The mission and objectives of the Sabine-Neches AMSC are carried out in unified fashion by its membership. This coordination is achieved under the organizational structure of multiple Memoranda of Understanding or Agreement (MOU/MOA). Specifically identified within the Sabine-Neches Area Maritime Security Plan are:

- MOA between US Coast Guard and the State of Texas for the enforcement of Safety and Security Zones,
- MOA between Department of Defense (DOD) and Department of Homeland Security (DHS) on the use of Coast Guard capabilities and resources in support of the National Military Strategy,
- MOU between US Coast Guard and Military Traffic Management Command (MTMC) to ensure coordinated port safety and security support and to facilitate the deployment or mobilization of Armed Forces from domestic seaports,

- MOU between Maritime Administration (MARAD), US Army Forces Command (FORSCOM), US Northern Command (NORTHCOM), US Transportation Command (TRANSCOM), US Army Corps of Engineers, Transportation Security Administration (TSA), and the US Coast Guard to ensure military and U.S. commercial seaport and related intermodal system readiness, and
- MOA's between US Coast Guard COTP/FMSC Port Arthur, Jefferson County Sheriff's Office, and Calcasieu Parish Sheriff's Office for the collaborative enhancement of safety and security of waters of concurrent jurisdiction, including but not limited to the cooperative enforcement of maritime safety and security zones created by the US Coast Guard under the authority of the Magnuson Act confided at 50 U.S.C. 191, and implemented at 33 C.F.R. Part 6, and the Ports and Waterways Safety Act as confided at 33 U.S.C. 1221. Local representatives of each identified MOU/MOA are regularly engaged with regard to the maintenance, exercise, and execution of each through relationships.

Best Practice: Cooperation and communication with Federal, State, Local agencies and Port Partners on maritime security.

Recommendation: Continue coordination of exercises and meetings with other agencies and port partners.

Best Practice: Command has solid relationship with Office of Homeland Security and Emergency Preparedness (OHSEP) along with South West Louisiana (SWLA) Mutual Aid Association and Local Emergency Preparedness Committee that proofed invaluable during 2017 Hurricane season. During the storms, our port partners and other government agencies worked together through port coordination calls assessing the port conditions and recovery phase.

Recommendation: Command staff maintain current relationship with other agencies and port partners and by validating contact information.

Saint Louis AMSC

Best Practice: Developed, orchestrated, and conducted the first Complex Coordinated Terrorist Attack (CCTA) Full-Scale Exercise in the Sector's AOR. Used regimented and detailed planning activities to develop robust Master Scenario Events List (MSEL) synchronizing attack events at three separate locations in two states, including a military installation. The exercise provided an excellent opportunity for the 270 participants to test local tactics, techniques, and protocols, and allowed senior level personnel in the first response community to gain a better understanding of capabilities and limitations in the planning cycle. Elected officials and senior level members of the regions' largest agencies gained valuable knowledge on maritime response, and command and control operations.

Best Practice: Developed, coordinated, and conducted the first Maritime Industry Cyber Workshop taught by subject matter experts from the Federal Bureau of Investigation, academia, and local fortune 500 Companies in the St. Louis area. The workshop provided an excellent opportunity for private sector participants to gain perspective on cyber risk mitigation best practices and the commitment needed to protect company assets. There were 50 attendees from 38 public/private agencies from within the bi-state port-wide area.

South Louisiana AMSC

Best Practice: Port Security Specialists facilitated bi-weekly Virtual Interagency Operations Center briefings between MSU Houma, MSU Morgan City, Customs Border Patrol (CBP) and CBP-Office of Air and Marine (OAM). These briefings: 1) enhanced MDA and force multiplication; and 2) increased joint boarding operations and associated arrests/detentions throughout the COTP Houma zone.

Best Practice: Port Security Specialists maintained positive working relationships with their counterparts who manage neighboring AMSCs, including Sector New Orleans, MSU Baton Rouge, MSU Lake Charles, and the District Eight Gulf of Mexico. The Port Security Specialists all serve as AMSC executive secretaries and share best practices and security information that ensures consistency throughout the Louisiana Gulf Coast.

Best Practice: Law enforcement communications, joint operations, and arrests have significantly increased due to the active and robust 80-member Law Enforcement Sub-Committee facilitated by CBP. Unit Houma Boat Forces maintained continuous communications with its law enforcement agency partners throughout the COTP zone, resulting in many successful patrols.

South Texas AMSC

Best Practice: The use of the AWS as an augment to Homeport in the rapid dissemination of MARSEC Notifications.

Best Practice: Engagement between AMSC and industry-focused trade groups.

Best Practice: Maintaining engagement with the nearest FBI InfraGard chapter as a means of keeping informed on current and immerging cyber threats.

Best Practice: Passing information from the U.S. Computer Emergency Readiness Team and Industrial Control Systems Cyber Emergency Readiness Team to AMSC members and other port partners.

Eastern Great Lakes AMSC

Best Practice: Senior leadership continues to participate at each Regional AMSC meeting. Leadership includes the Sector Commander, Deputy Sector Commander, Prevention and Response Department Heads, Contingency Planning Force Readiness Chief, Marine Safety Unit Cleveland, Intel, Enforcement, and Station personnel.

Lake Michigan AMSC

Best Practice: The Committees remain excellent forums to enable OGAs and industry in efficiently meeting their specific goals during regional exercises. Sector Lake Michigan began an initiative to embed a discussion-based exercise within AMSC meetings using a high-risk TSI for the scenario. This promoted a better understanding of responders 'jurisdictions, plans, and capabilities for a maritime incident. This also helped meet our goal to spur interagency dialogue after the meetings. At future meetings, we intend to take the exercise through subsequent steps of the response to the scenario and walk through additional TSIs.

Sault Region AMSC

Best Practice: USCG Sector Sault Sainte Marie and Mackinac County Emergency Management/911 completed an 800MHz integration/interoperability project to assist in tactical coordination between USCG and local/state resources. This project enhances communications, sharing of information, and force readiness response for all hazards throughout the region.

Best Practice: In 2017, the Sault Region AMSC established a partnership with Michigan's Department of Technology Management and Budget for cybersecurity-related issues/training. This partnership enhances the committee's subject matter expertise in cybersecurity, which has been a glaring deficiency in the past. The State of Michigan is at the leading edge of cybersecurity efforts and has the ability to provide training or advice on many cybersecurity related topics. The partnership built between the AMSC and the state will be invaluable to regional cybersecurity efforts for years to come.

Southeast Michigan AMSC

Best Practice: Continued "Port Security Grant Recipient Presentations" as a recurring meeting agenda item to better educate port stakeholders regarding port security countermeasures being introduced in the area as well as provide insight into the grant process as experienced by successful applicants.

Best Practice: Efforts to provide a strengthened security focused meeting agenda continued resulting in greater attendance and committee participation. Continued "Keynote Speaker" standard agenda item to ensure all AMSC members were educated about a relevant security topic each meeting.

Best Practice: Coordinated with the Detroit District Protective Security Advisor (PSA) from the U.S. Department of Homeland Security (DHS) to discuss how MSU Toledo can support them with identifying, monitoring and assessing critical infrastructure in their district. Additionally, it was discussed how they might assist introducing and assisting partners and stakeholders in Southeast Michigan with DHS initiatives and products.

Best Practice: Focused searches to attain free venues with adequate free parking for general, subcommittee and workgroup meetings resulted in cost savings to government and increased participation.

Best Practice: During CY 2017, Sector Planning Staff combined the Detroit/St. Clair Rivers Operations Work Group (DSCROWG) and Marine Transportation Security Recovery Unit (MTSRU) Subcommittee meetings as have been determined to have similar objectives due to similar functions, goals, and audience.

Best Practice: With multiple Regional Sub-Committees, Sector Planning Staff focused on zone wide coordination with security centric meeting agendas, topics, and scheduled subject matter experts that provided keynote addressed. This ensured the same information was disseminated throughout the AOR.

Western Lake Superior AMSC

Best Practice: AMSC members augment local Law Enforcement for large-scale events.

Best Practice: Members across AMSC incorporated as coaches/evaluators for Full Scale Exercise (FSE) AMSTEP.

Best Practice: Provided expertise to AMSC partner agency for national level exercise.

Best Practice: Internship program with AMSC member agencies. The local industry training opportunities provided members of MSU to work on viable projects with our partners and obtain a better understanding on how these partners would respond to an attack or incident in the local COTP Zone.

Best Practice: AMSC coordination and creation of exercises for all AMSC members to include airport authority, port authority, law enforcement, fire department, Emergency

Operating Center (EOC), and the US Air Force. TTX scenario of a plane hijack by terrorist that crashes into the port. First of three that will culminate into a full-scale security/mass rescue exercise.

Best Practice: Monthly AMSC/Area Contingency (AC) stakeholder breakfasts. These breakfasts are hosted by the MSU Duluth CO and are attended by 10-15 members of the AMSC and AC. Members get a chance to discuss topics in a stress free, no fault environment and have been a catalyst to open dialog and enhanced relationships throughout the maritime security and environmental response communities. With the loss of funding previously used by the PSS to conduct meetings, these breakfasts have been crucial to maintaining open communications between all stakeholders.

Central California AMSC

Best Practice: Leadership of the Port Wide Stakeholders Strategic Planning Subcommittee (PWSSPS) rotates annually between the Port of Los Angeles and the Port of Long Beach. This allows for greater transparency and buy-in during the vetting process. This methodology is recommended for AMSC's whose AOR's include multiple port jurisdictions. Encouraging OGA leadership of the AMSC's PSGP reduces some of the tension felt toward the COTP by applicants whose projects were not selected.

Best Practice: For the first time, in 2017, the PWSSPS decided to use the Port Security Grant (PSG) First program scoring methodology to rank the projects. Previously, the Chair of the Subcommittee would develop a scoring methodology and then my PSS would replicate the scoring/ranking via PSG First. By using the PSG First methodology at inception, the process was quicker and already conformed to USCG and Federal Emergency Management Agency (FEMA) scoring priorities.

Best Practice: When pursuing the programmatic component of developing a cybersecurity seminar, pay attention to the sequence of speakers. We followed a "describe the problem," "identify risks," then "offer solutions" format. This worked well and maintained audience attention.

Northern California AMSC

Best Practice: The Cybersecurity subcommittee continues to publish a quarterly Cybersecurity Newsletter that discusses cybersecurity issues of maritime interest. This publication is written to be socialized to all port stakeholders in the region and to inform USCG Eleventh District Staff, Pacific Area (PACAREA) Staff and Coast Guard Cybersecurity Command (CGCYBERCOM) Staff of local cybersecurity issues. It is also read by other USCG Sector Commands in California.

Recommendation: Continue to publish newsletter.

Best Practice: The Northern California AMSC, Law Enforcement Subcommittee (Neptune Coalition) continues to work closely with local law enforcement's marine units to train, exercise, and amend the region's Preventative Radiological/Nuclear Detection (PRND) Concept of Operations (CONOPS) and Standard Operating Procedures (SOP). These documents outline procedures for maritime detection, characterization and reporting of radiological materials in the maritime environment. Over the past five years, these procedures have been tested as part of the annual Vigilant Guardian exercise series.

Recommendation: Continue to work with local LE to enhance PRND capabilities.

San Diego AMSC

Best Practice: The San Diego AMSC ESC re-established its Maritime Law Enforcement (MLE) and Intel subcommittees to better integrate and align AMSC member agencies LE and Intel resource maritime efforts with AMSC mission and needs. The new MLE and Intel subcommittee will integrate federal, state, and local law enforcement, emergency responders, and port partners in the assessment of maritime security risk and development of risk mitigation strategies under the leadership of the AMSC ESC.

Recommendation: Continue to publish newsletter.

Best Practice: Sector San Diego and the San Diego AMSC successfully integrated Command Bridge, a Geographic Information System (GIS) situational awareness platform, to aggregate an array of port wide sensor feeds to provide the San Diego Joint Harbor Operations Center with timely, relevant, and actionable information to monitor and respond to maritime activity.

Recommendation: Continue to work with local LE to enhance PRND capabilities.

Columbia River AMSC

Best Practice: Co-scheduling the AMSC meeting to follow regular maritime stakeholder meeting. Sector Columbia River holds and industry Breakfast each month, which is attended by Sector leadership as well as numerous agencies and stakeholder partners. By holding the quarterly AMSC meeting directly after, we capitalize on the significant overlap in membership between these meetings and increase AMSC participation. This model will be duplicated over the next year to take advantage of the standing Harbor Safety Committees located in Coos Bay, Oregon and Grays Harbor, Washington.

Best Practice: An administrative review of the committee was conducted as well as examining some of the methods and practices with other AMSCs. This review, as well as

refocusing on the goals of the Risk Management Plan has given the Committee renewed direction.

Puget Sound AMSC

Best Practice: An AMSC Intelligence Sharing and Multi-Prong Attack Workshop was held in October 2017, which included Intelligence and Response modules at different MARSEC Levels. This 4-hour workshop had an Intelligence sharing module and a Multi-prong attack of a variety of targets in the port module. The workshop was attended by 42 people and was widely praised by Federal, State and local Intelligence and Response Agencies as well as representatives from Maritime Transportation components such as Washington State and County Ferries, Holland America and Argosy Cruises. Key take always from the workshop included the challenges by both agencies and stakeholders alike in maintaining MARSEC 2 condition for an extended period of time. Members requested if possible Selective MARSEC implementation by COTP by either Industry Type or Geography.

Best Practice: Formed a Drone Threat Working Group.

Commonwealth of Northern Mariana Islands (CNMI) AMSC

Best Practice: The CNMI AMSC utilized the CNMI Emergency Operations Center for meetings and exercises to identify and familiarize participants with how the site would be used in an actual emergency.

Guam AMSC

Best Practice: Re-activation of Joint Harbor Security Committee in continually addressing/developing security integration processes amongst responders/stakeholders in the event of a TSI or a conventional attack in the navigable waters of the Sector Guam Area of operations or Commercial Ports of Guam and the Commonwealth of Northern Marianas Islands.

Hawaii and American Samoa AMSC

Best Practice: By utilizing the unique capabilities of University of Hawaii's (UH's) Cyber Range, the AMSC was able to combine a functional, information technology (IT)-based exercise with a traditional discussion-based tabletop to address today's maritime cyber threats and better prepare for the future. The exercise brought IT managers and technical staff together with corporate leadership, maritime operations personnel, and government agencies. This fusion of disciplines highlighted the challenges faced when translating technical

cybersecurity concepts to less tech-grounded decision-makers, as well as the complexities of building secure network environments for maritime critical infrastructure. It also raised awareness of the threat of cyber-attacks on the MTS and exposed many port partners to the potential real-world consequences.

The AMSC subsequently partnered with the local FBI InfraGard chapter to continue these collaborative efforts by chartering a joint Maritime Special Interest Group (SIG)/AMSC Cybersecurity Workgroup. Recognizing that the cyber-threat is not exclusive to the maritime domain, the SIG will provide an ongoing opportunity for port security stakeholders to network and share information with colleagues from other economic sectors and industries.

Best Practice: Field-testing of the Alternate Port Initiative uncovered a number of important logistical and planning requirements to ensure that port operations can be successfully relocated in the event of Honolulu Harbor closure. A concerted effort is underway to meet these requirements utilizing Pearl Harbor as a cargo offloading facility and to source additional Oahu container lay-down area sites for post-offload storage and distribution. The MTS Recovery Workgroup continued to develop additional alternate port concepts using Kalaeloa Barbers Point Harbor and neighbor island ports to ensure all viable maritime transportation options are available in the event of a disaster.

Prince William Sound AMSC

Best Practice: Port partners can benefit from observing other exercises in the AOR. It can help make them familiar with other plan holders, available resources, and incident management principles.

Recommendation: Maximize participation of the AMSC members in Exercises throughout the Port.

Best Practice: Port Security Specialist has little opportunity to visit facilities and evaluate Security procedures on their own.

Recommendation: Ensure the Port Security Specialist is a member of all Unit Facility Inspections.

Southeast Alaska (SEAK) AMSC

Best Practice: Partnering with the Domestic Nuclear Detection Office to create a Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Annex to the AMSP.

Best Practice: Evolution of Port Security Meetings (PSC) into Port Safety and Security Meetings (PSSC). Sector Juneau has several small Ports located throughout SEAK.

Stakeholders are often just as interested (if not more) in receiving and sharing safety information as security information. Broadening the scope of the meetings increases their value to Port stakeholders and improves participation.

Western Alaska (WA) AMSC

Best Practice: The use of the WAAMSC to disseminate information to the members and industry partners on the multiple ongoing Arctic initiatives and programs including Arctic Shield, the International Maritime Organization (IMO) Polar Code implementation, and deepwater port developments.

Best Practice: The use of the WAAMSC partnerships to engage the maritime community in homeland defense and maritime security exercises and training opportunities.